

# SEQUENCE LISTING

<110> Hawkins, Mary E.  
 Pfleiderer, Wolfgang  
 Balis, Frank  
 The Government of the United States of America  
 as represented by The Secretary of the  
 Department of Health and Human Services

<120> Pteridine Nucleotide Analogs

<130> 015280-351100US

<140> US 09/786,666

<141> 2001-03-07

<150> US 60/099,487

<151> 1998-09-08

<150> WO PCT/US99/20541

<151> 1999-09-07

<160> 22

<170> PatentIn Ver. 2.1

<210> 1

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide  
 PTR21

<220>

<221> modified\_base

<222> (7)

<223> n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
 beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
 N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 1

gtgtggnaaa tctctagcag t

21

<210> 2

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide  
 PTR22

<220>

<221> modified\_base

<222> (10)

<223> n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
 beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
 N-diisopropyl)phosphoramidite (6MAP, compound 11)

09786666-051501

<400> 2  
gtgtggaaan tctctagcag t

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<210> 3  
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<223> Description of Artificial Sequence:oligonucleotide  
PTR23

<220>  
<221> modified\_base  
<222> (16)  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 3  
gtgtggaaaa tctctngcag t

21

<210> 4  
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<220>  
<223> Description of Artificial Sequence:oligonucleotide  
PTR24

<220>  
<221> modified\_base  
<222> (7)  
<223> n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 4  
actgctngag attttccaca c

21

<210> 5  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:oligonucleotide  
PTR25

<220>  
<221> modified\_base  
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<223> n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 5  
actgctagng attttccaca c

21

<210> 6  
<211> 21  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence:oligonucleotide  
PTR28

<220>  
<221> modified\_base  
<222> (11)  
<223> n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 6  
actgctagcc nttttccaca c

21

<210> 7  
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<212> DNA  
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HP21

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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 7  
attccacaan gccgtgtca

19

<210> 8  
<211> 21  
<212> DNA  
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HP22

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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 8  
agaggtgtcc ncctgtggag a

21

<210> 9  
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<212> DNA  
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HP23

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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 9  
agaggtgtac nagtgtggag a

21

<210> 10  
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HP24

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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (6MAP, compound 11)

<400> 10  
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21

<210> 11  
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<213> Artificial Sequence

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PTR31

<220>  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

09736666 "061501

<400> 11  
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21

<210> 12  
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<220>  
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PTR32

<220>  
<221> modified\_base  
<222> (10)  
<223> n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 12  
gtgtggaaan tctctagcag t

21

<210> 13  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
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PTR33

<220>  
<221> modified\_base  
<222> (14)  
<223> n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 13  
gtgtggaaaa tctctngcag t

21

<210> 14  
<211> 21  
<212> DNA  
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<220>  
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PTR34

<220>  
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<222> (7)  
<223> n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 14  
actgctngag attttccaca c

21

<210> 15  
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<223> Description of Artificial Sequence:oligonucleotide  
PTR35

<220>  
<221> modified\_base  
<222> (9)  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 15  
actgctagng attttccaca c

21

<210> 16  
<211> 21  
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<220>  
<223> Description of Artificial Sequence:oligonucleotide  
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<220>  
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<222> (11)  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 16  
actgctagag nttttccaca c

21

<210> 17  
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<212> DNA  
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<220>  
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PTR37

<220>  
<221> modified\_base  
<222> (18)  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 17  
actgctagag attttccnca c

21

<210> 18  
<211> 21  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence:oligonucleotide  
PTR38

<220>  
<221> modified\_base  
<222> (11)  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 18  
actgctagcc nttttccaca c

21

<210> 19  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:oligonucleotide  
HP31

<220>  
<221> modified\_base  
<222> (10)  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 19  
attccacaan gccgtgtca

19

<210> 20  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:oligonucleotide  
HP32

<220>  
<221> modified\_base  
<222> (11)  
<223> n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 20  
agaggtgtcc ncctgtggag a

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<210> 21  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:oligonucleotide  
HP33

<220>  
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<222> (11)  
<223> n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 21  
agaggtgtac nagtgtggag a

21

<210> 22  
<211> 21  
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<223> Description of Artificial Sequence:oligonucleotide  
HP34

<220>  
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beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
N-diisopropyl)phosphoramidite (DMAP, compound 12)

<400> 22  
agaggtgtaa naatgtggag a

21